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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/355,268	04/13/2000	Nicholas Dominic Wells	50060-034	6198

7590 07/12/2004

McDermott Will & Emery
600 13th Street NW
Washington, DC 20005-3096

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 07/12/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/355,268

Applicant(s)

WELLS ET AL.

Examiner

Michael N. Opsasnick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413).
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8,10-16,18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis et al (5583962).

As per claims 1,6, Davis et al (5583962) teaches:

“a method of audio signal handling.....audio signal ,
characterized.....comprises:” as decompressed formatted encoded data (fig. 5, col. 8 lines 39-64);

“deriving an auxiliary data signal.....communicating the auxiliary data
signal.....re-encoding the decode audio signal.....data signal” as decoding the formatted
data, extracting spectral information, calculating a steering quantity and re-encoding the
information wrt the steering information (col. 8 line 65 – col. 9 line 60);

As per claim 2, Davis et al (5583962) teaches:

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“wherein the auxiliary data signal....audio signal as steering information is associated with multi-channel, multi-band information (col. 9 lines 30-38)

As per claim 3, Davis et al (5583962) teaches:

“wherein the auxiliary data signal....audio signal” as steering info is associated with spectral information (col. 9 lines 40-46)

As per claim 4, Davis et al (5583962) teaches:

“wherein the auxiliary data.....audio signal” as deformatter contained sample time information (col. 32 line 60-65; referring back to the TDAC, col. 8 lines 25-37)

As per claims 5,19 and 20, Davis et al (5583962) teaches inserting ancillary data into the information stream (as containing information regarding the sound source itself – col. 31 lines 10-18, col. 32 lines 13-24)

As per claim 7, Davis et al (5583962) teaches:

“wherein the analysis comprises application of a sub-band filter bank (subband analysis (col. 6 lines 33-43))

As per claims 8,15,16 Davis et al (5583962) teaches:

“wherein the auxiliary data...sub-band....and the method of quantisation within each sub-band.....encoded audio signal frequency” as steering information reflects the result

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of frequency analysis of the subbands (Col. 9 lines 1-21; and the subbands using the higher frequency ranges)

As per claim 10, Davis et al (5583962) teaches frequency analysis information (frequency sub-bands -- col. 9 lines 1-21; examiner notes that the claimed features are in the alternate (or) language and therefore when the prior art meets one of the claim limitations, all of the claim limitations are met)

As per claim 11, Davis et al (5583962) teaches a common signal path for the auxiliary data and the decoded data (Fig. 8)

As per claims 12,18, Davis et al (5583962) teaches a data integrity check in the form of a signal notifying the quality of the data (col. 7 lines 1-16)

As per claims 13, 14 Davis et al (5583962) teaches user data bits which can be in lsb format (col. 16 lines 5-30, referring to Table I)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (5583962) in view of ISO/IEC 11172-3 (1993).

As per claims 9 and 17, Davis et al (5583962) is silent on the use of the encoder/decoder technique with respect to MPEG type data, however, ISO/IEC 11172-3 (1993) teaches subband analysis with header, bit allocation, and scalefactoring manipulations (pp71-73). Therefore, it would have been obvious to one of ordinary skill in the art of encoding/decoding to modify the teachings of Davis to be used for MPEG data because the system as designed by Davis et al works well with psycho-acoustic based data (Davis et al, col. 5 lines 30-62).

Response to Arguments

5. Applicant's arguments filed 5/3/2004 have been fully considered but they are not persuasive. As per applicant's arguments that Davis et al citations only pertain to encoding and decoding of audio signals, (as opposed to applicant's claimed encoding, decoding, and re-encoding), examiner argues that the extra converter, inv filter bank, and a second converter, as taught by Davis et al (Fig. 2, and Fig. 4), can be considered as an additional decoding/encoding step, wherein the input information is encoded, decoded, converted, inverse filter bank, and used to re-encode the information.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231
or faxed to:
(703) 872 9314,
(for informal or draft communications, please label "PROPOSED" or
"DRAFT")
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is Tuesday – Thursday, 9am-5pm.

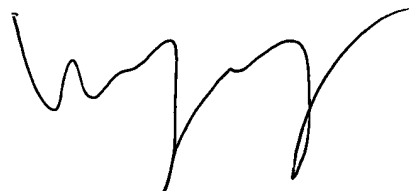
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno
7/7/2004



W. R. YOUNG
PRIMARY EXAMINER